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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,783	08/17/2006	Morito Morishima	YAMA:138	9499
37013 7590 11/25/2008 ROSSI, KIMMS & McDOWELL, LLP. 20609 Gordon Park Square, Suite 150 Ashburn, VA 20147				
EXAMINER				
PAUL, DISLER				
ART UNIT		PAPER NUMBER		
2614				
MAIL DATE		DELIVERY MODE		
11/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,783

Applicant(s)

MORISHIMA, MORITO

Examiner

DISLER PAUL

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/26/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3-5-8; 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3-8; 10-14 is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Response to Arguments

The applicant's amended claims wherein having "a sensor attached to a to-be-detected speaker and a distance calculator configured to calculate, a distance between each of the measuring two speakers and the to-be-detected speaker based on the measured time difference and a position calculator configured to calculate a position of the to-be-detected speaker based on the known distance between the at least two measuring speakers and the calculated distance; and a storage that stores positions of at least two measuring speakers and the calculated speaker position" have been analyzed and are

rejected in view of Sasaki ((fig.14-15, 19; 48, 53; par [0217-0220]; fig.12; par [0310-0312,0321; 0327-0328])/with signals distance from all speakers then locations is determined/detected and stored).

Claim Rejections - 35 USC § 112

1. Claim 5 recites the limitation "the positions of the two speakers" in claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki et al. (US 2005/0152557 A1).

Re claim 5, Sasaki et al. disclose of the sound reproducing apparatus for driving a plurality of speakers to reproduce multi-channel sound, the sound reproducing apparatus comprising: a generator configured to generate a measuring signal and

supply the measuring signal in turn to two of the plurality of speakers having known positions with respect to a listening position; a sensor attached to a to-be-detected speaker and transmits a reception notification as to each of the at least two measuring speakers when receiving a measuring sound wave radiated from each of the measuring two speakers in accordance with the measuring signal (fig.11-12; 15; 22; 48,50; par [0025; 0027]/listeners to each of plurality of speakers is known and measured) and a time difference measuring unit configured to measure, as to each of the-at least two measuring speakers, a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from the sensor (fig.6; par [0126; 0026; 0584, 0174;] / timer- propagation delay of receive generating and receive as per each speaker); and a distance calculator configured to calculate, a distance between each of the measuring two speakers and the to-be-detected speaker based on the measured time difference (fig.14-15, 19; 48, 53; par [0217-0220]) an a position calculator configured to calculate a position of the to-be-detected speaker based on the known distance between the at least two measuring speakers and the calculated distance; and a storage that stores positions of at least two measuring speakers and the calculated speaker position (fig.12; par [0310-0312,0321; 0327-0328]/with signals distance from all speakers then locations is determined/detected and stored).

Re claim 6, the sound reproducing apparatus according to Claim 5, further comprising a speaker layout corrector that configured to change over signal lines from an amplifier to

the speakers and correct an incorrect layout of the speakers when respective speaker positions stored in the storage are out of a predetermined relative position relationship of the speakers (par [0329; 0332]).

Re claim 7, the sound reproducing apparatus according to Claim 5, further comprising a sound field controller that configured to produce sound image localization as if the speakers were located in predetermined recommended positions, respectively, based on respective speaker positions stored in the storage (par [0340; 0447-0448]).

Allowable Subject Matter

1. Claims 1-3; 8; 10-14 are allowed.

Re claims 1, None of the prior art of record disclose of the specific wherein Having a sound reproducing apparatus for driving a plurality of speakers with two of the speakers having a known distance therebetween to reproduce multi-channel sound, the sound reproducing apparatus comprising: and having at least two sensors disposed in positionable to a listening position, each of the at least two sensors transmitting a reception notification when receiving a measuring sound wave radiated from the to-be-detected each of the speakers in accordance with the measuring signal; a time difference measuring unit that configured to measures, as to each of the at least two sensors, a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from each of

the at least two sensors; a distance calculator that configured to calculate, as to each of the at least two sensors, a distance between each of the at least two sensors and a distance between each of the at least two sensors and each of detected two speakers based on the measured time difference and the known distance between the two speakers; a position calculator that configured to calculate a position of the to-be-detected each of the two speakers based on the calculated distance between the at least two sensors and the calculated distance between each of the two speakers from each of the at least two sensors.

RE claim 2, None of the prior art of record disclose of the specific wherein having at two sensors disposed in a listening position, each of the at least two sensors transmitting a reception notification when receiving a measuring sound wave radiated from the to-be-detected speaker in accordance with the measuring signal and a time difference measuring unit configured to measure, as to each of the at least two sensors, a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from each of the at least two sensors; a distance calculator configured to calculate, as to each of the at least two sensors, a distance between each of the at least two sensors and the to-be-detected speaker based on the measured time difference; a position calculator configured to calculate a position of the to-be-detected speaker based on a distance between the at least two sensors and the calculated distance.

Re claim 8 has been analyzed and allowed for same reason as in claim 2.

Re claim 11 has been analyzed and allowed for same reason as in claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ping Lee/
Primary Examiner, Art Unit 2614

Application/Control Number: 10/589,783

Page 8

Art Unit: 2614

/D. P./

Examiner, Art Unit 2614